

WHAT IS CLAIMED

1. A method of ranking the relevance of a node in a linked set of nodes, comprising:
 - determining an authority-like weight for said node using a non-compound, non-normalized Forward operator; and
 - determining a hub-like weight for said node using a non-compound, non-normalized Backward operator,
 - said steps of determining being mathematically decoupled.
2. The method of Claim 1, wherein said determining an authority-like weight of a node comprises:
 - choosing a forward start vector;
 - determining a node weight using the non-compound, non-normalized Forward operator;
 - normalizing the node weight; and
 - testing for convergence, wherein said steps of determining a node weight and normalizing the node weight are repeated until the node weight converges to a constant value.
3. The method of Claim 1, wherein said determining a hub-like weight of a node comprises:
 - choosing a backward start vector;
 - determining a node weight using the non-compound, non-normalized Backward operator;
 - normalizing the node weight; and
 - testing for convergence, wherein said steps of determining a node weight and normalizing the node weight are repeated until the node weight converges to a constant value.
4. The method of Claim 1, further comprising:
 - determining a principal eigenvector of a matrix.
5. The method of Claim 1, further comprising:

selecting a search term; and
displaying a ranking result.

6. The method of Claim 1, further comprising:
ranking the textual content of the node.

7. A system for ranking the relevance of a node in a linked set of nodes comprising:
a calculator configured to calculate an authority-like weight for said node and a hub-like weight for said node, using, respectively, a non-compound, non-normalized Forward operator and a non-compound, non-normalized Backward operator, said calculations being mathematically decoupled.

8. The system of Claim 7, wherein said calculator comprises:
a calculator configured to iteratively calculate a node forward weight, normalize the node forward weight, and test for convergence until the node forward weight converges to a constant value.

9. The system of Claim 7, wherein said calculator comprises:
a calculator configured to iteratively calculate a node backward weight, normalize the node backward weight, and test for convergence until the node backward weight converges to a constant value.

10. The system of Claim 7, said calculator comprising:
a calculator configured to calculate a principal eigenvector of a matrix.

11. The system of Claim 7, further comprising:
a search term selection device; and
a display.

12. The system of Claim 7, further comprising:
a textual content ranking mechanism.

13. A method of ranking the relevance of a node in a linked set of nodes, the improvement comprising:

determining one of

an authority-like weight for said node using a non-compound, non-normalized Forward operator, and

a hub-like weight for said node using a non-compound, non-normalized Backward operator.

14. The method of Claim 13, wherein said determining an authority-like weight of a node comprises:

choosing a forward start vector;

determining a node weight using the non-compound, non-normalized Forward operator;

normalizing the node weight; and

testing for convergence, wherein said steps of determining a node weight and normalizing the node weight are repeated until the node weight converges to a constant value.

15. The method of Claim 13, wherein said determining a hub-like weight of a node comprises:

choosing a backward start vector;

determining a node weight using the non-compound, non-normalized Backward operator;

normalizing the node weight; and

testing for convergence, wherein said steps of determining a node weight and normalizing the node weight are repeated until the node weight converges to a constant value.

16. The method of Claim 13, further comprising:

determining a principal eigenvector of a matrix.

17. The method of Claim 13, further comprising:

selecting a search term.

18. The method of Claim 13, further comprising:
ranking the textual content of the node.

19. A system for ranking the relevance of a node in a linked set of nodes,
comprising:

a calculator configured to calculate one of an authority-like weight for said node and a hub-like weight for said node, using, respectively, a non-compound, non-normalized Forward operator and a non-compound, non-normalized Backward operator, said calculations being mathematically decoupled; and

a relay module connected to said calculator and configured to relay a corresponding calculated authority-like weight and hub-like weight to a display.

20. The system of Claim 19, wherein said calculator comprises:

a calculator configured to iteratively calculate a node forward weight, normalize the node forward weight, and test for convergence until the node forward weight converges to a constant value.

21. The system of Claim 19, wherein said calculator comprises:

a calculator configured to iteratively calculate a node backward weight, normalize the node backward weight, and test for convergence until the node backward weight converges to a constant value.

22. The system of Claim 19, said calculator comprising:

a calculator configured to calculate a principal eigenvector of a matrix.

23. The system of Claim 19, further comprising:

a search term selection device; and
a display.

24. The system of Claim 19, further comprising:

a textual content ranking mechanism.

25. A computer program product configured to host instructions corresponding to any one of the steps of Claims 1-6 and 13-18.

26. A system for ranking the relevance of a node in a linked set of nodes, comprising:

means for determining an authority-like weight for said node using a non-compound, non-normalized Forward operator; and

means for determining a hub-like weight for said node using a non-compound, non-normalized Backward operator,

said means for determining an authority-like weight and said means for determining a hub-like weight being mathematically decoupled.

27. The system of Claim 26, wherein said means for determining an authority-like weight of a node comprises:

means for choosing a forward start vector;

means for determining a node weight using the non-compound, non-normalized Forward operator;

means for normalizing the node weight; and

means for testing for convergence, wherein said means for determining a node weight and means for normalizing the node weight are configured to repeat their respective operations until the node weight converges to a constant value.

28. The system of Claim 26, wherein said means for determining a hub-like weight of a node comprises:

means for choosing a backward start vector;

means for determining a node weight using the non-compound, non-normalized Backward operator;

means for normalizing the node weight; and

means for testing for convergence, wherein said means for determining a node weight and means for normalizing the node weight are configured to repeat their respective operations until the node weight converges to a constant value.

29. The system of Claim 26, further comprising:

means for determining a principal eigenvector of a matrix.

30. The system of Claim 26, further comprising:

means for selecting a search term; and
means for displaying a ranking result.

31. The system of Claim 26, further comprising:
means for ranking the textual content of the node.

32. A system for ranking the relevance of a node in a linked set of nodes, the improvement comprising:

means for determining one of
an authority-like weight for said node using a non-compound, non-normalized Forward operator, and
a hub-like weight for said node using a non-compound, non-normalized Backward operator.

33. The system of Claim 32, wherein said means for determining an authority-like weight of a node comprises:

means for choosing a forward start vector;
means for determining a node weight using the non-compound, non-normalized Forward operator;
means for normalizing the node weight; and
means for testing for convergence, wherein said means for determining a node weight and means for normalizing the node weight are configured to repeat their respective operations until the node weight converges to a constant value.

34. The system of Claim 32, wherein said means for determining a hub-like weight of a node comprises:

means for choosing a backward start vector;
means for determining a node weight using the non-compound, non-normalized Backward operator;
means for normalizing the node weight; and
means for testing for convergence, wherein said means for determining a node weight and means for normalizing the node weight are configured to repeat their respective operations until the node weight converges to a constant value.

35. The system of Claim 32, further comprising:
means for determining a principal eigenvector of a matrix.

36. The system of Claim 32, further comprising:
means for selecting a search term.

37. The system of Claim 32, further comprising:
means for ranking the textual content of the node.